

## # Item X

### BOARD OF SUPERVISORS ACTION ITEM

#### COMMITTEE OF THE WHOLE

**SUBJECT:** CPAM 2009-0002, ZOAM 2009-0004, DOAM 2009-0004/Proposed Chapter 1222 of the Codified Ordinances of Loudoun County and Amendments to Chapters 1066 and 1220 of the Codified Ordinances of Loudoun County/  
Chesapeake Bay Preservation Act Amendments

**ELECTION DISTRICT:** COUNTYWIDE

**CRITICAL ACTION DATE:** AT THE PLEASURE OF THE BOARD

**STAFF CONTACTS:** Laura Edmonds/Terrance Wharton (Director),  
Department of Building and Development  
Joe Gorney/Julie Pastor (Director),  
Department of Planning

#### RECOMMENDATIONS:

**Planning Commission:** At the May 12, 2010 Work Session, the Planning Commission voted (6-2-1 Klancher, Syska opposed; Keirce absent) to forward the ZOAM-2009-0004, DOAM-2009-0004, the Chesapeake Bay Preservation Ordinance ("CBPO"), and the Proposed Amendments to the Codified Ordinance of Loudoun County associated with the CBPO, as amended through May 12, 2010, to the Board of Supervisors ("Board") with a recommendation of approval. The Planning Commission also voted (8-0-1 Keirce absent) to forward CPAM-2009-0002 to a future Work Session for certification. The CPAM was deferred from certification until the Board's schedule for action is further defined, due to the requirement that the Board act within 90 days of certification the CPAM by the Planning Commission.

**Staff:** Staff recommends that the Board forward the draft Chesapeake Bay Preservation Act amendments to a future meeting for further discussion.

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#### BACKGROUND:

The Board held a public hearing on the draft Chesapeake Bay Preservation Act amendments ("draft amendments") on May 24, 2010. A total of 65 speakers spoke at the public hearing. The speakers included homeowners from several residential communities, representatives from several Homeowner Associations, developers, farmers, and proponents of environmental protection. There was a general consensus regarding the need for clean water, qualified by

concerns associated with the potential impacts of the draft amendments. The prevailing area of concern expressed by homeowners was that they were unaware of, and disengaged from, the process and needed to be better informed about the draft amendments prior to Board action. Many homeowners expressed a concern that they do not understand how they will be affected. Some homeowners expressed concerns about potential restrictions and the high costs that would be associated with simple property improvements. Developers expressed concerns regarding the impact of the draft amendments on approved applications and the need for grandfathering. Farmers expressed concerns regarding the effect of a reduced erosion and sediment control threshold and a potential requirement to fence streams. Environmental proponents stated that Loudoun County's streams are degraded and that riparian buffers are a scientifically proven approach to improving water quality.

Following the public hearing, the Board voted (7-2 Delgaudio, Waters opposed) to forward the draft amendments to the June 15, 2010, Committee of the Whole Meeting for further discussion and for a recommendation on how to proceed with consideration of the draft amendments.

At the June 15, 2010, Committee of the Whole Meeting, the Board discussed the draft amendments and then voted (6-3 Delgaudio, Waters, York opposed) to: (1) forward the draft amendments to the September 21, 2010, Board Committee of the Whole Meeting for review; and (2) to direct staff to continue public outreach through meetings with each Board member (as requested) in each election district and other communication efforts and to advertise one additional public education meeting directed at Homeowner Associations.

## **ISSUES:**

Staff will provide a presentation summarizing the following topics during the meeting:

### **Education/Outreach**

Between the June 15, 2010, Board Committee of the Whole Meeting, and the September 21, 2010, Board Committee of the Whole Meeting, staff will have participated in six Public Outreach Forums (hosted by five Board members) and hosted a second HOA Information Session. The dates of these Public Outreach Forums and the second HOA Information Session are identified on the Chesapeake Bay Timeline ("Timeline") (Attachment #1). The Timeline also provides background on the meetings that took place prior to, and following, the approval of the Chesapeake Bay Preservation Act Work Program on April 7, 2009. Public Outreach Forum attendance averaged 40 residents; however, approximately 100 residents attended the Catoctin/Blue Ridge District Meeting. The Public Outreach Forums and HOA Information Session consisted of a staff presentation, which clarified the content of the draft amendments and what their effect would be on individual property owners, followed by a question and answer session. A sample staff presentation is provided as Attachment #2.

Staff prepared edits to both the draft Chesapeake Bay Preservation Act Ordinance ("CBPO") and the draft Chesapeake Bay Preservation Area Map ("Map") based upon citizen input that was obtained during the Public Outreach Forums and through the Chesapeake Bay e-mail and hotline.

## **Proposed CBPO Amendments**

The draft CBPO (Attachment #3) highlights staff edits presented to and accepted by the Planning Commission on May 12, 2010, in yellow, Planning Commission edits drafted on May 12, 2010, in green, and staff edits suggested since the May 12, 2010, Planning Commission Meeting in grey.

The Planning Commission edits clarify nonconforming structures and uses and required plan notes related to alternative onsite sewage systems.

The additional edits proposed by staff include clarifying: 1) the definition of “water body with perennial flow;” 2) the RPA delineation requirements; 3) nonconforming structures and uses; 4) the exemption for land disturbing activity of 2,500 square feet or less on properties located solely in the Resource Management Area; and 5) when the RPA buffer is required to be planted. These are in response to public comments received over the summer.

## **Proposed Map Revisions**

Staff has received inquiries from property owners regarding RPA that was shown on their property adjacent to streams that had no perennial flow present. Following several field visits, staff explored methods to further refine the RPA shown on the draft Map Countywide.

As originally drafted, the locations of water bodies with perennial flow were identified based upon historic soils drains data, which provides information on whether or not a stream is perennial, but may not accurately reflect the current location of the water body.

To improve the accuracy of the draft Map, staff compared the locations of water bodies with perennial flow as shown on the draft Map, to the locations of these water bodies as identified on the base map, which is derived from aerial photography. This comparison allowed staff to identify water bodies that may no longer be present due to development or that have migrated over time.

Staff also identified short stream segments with RPA that did not have any contributing drainage features flowing into them. The RPA shown on these short stream segments was likely the result of the streams being mislabeled as perennial during the creation of the soils drains data layer.

Staff subsequently combined the soils drains and base map data layers to create an enhanced drainage layer that incorporates the perenniality attribution from the soils drains layer and the positional accuracy of the base map layer, and used this enhanced drainage map layer to update the draft Map. During this process, staff also removed the short RPA stream segments from the draft Map, by correcting the identified discrepancies in the soils drains layer.

Exhibits illustrating various examples of the proposed updates to the draft Map are provided as Attachment #4.

The proposed revisions to the draft Map described above result in the RPA being removed from 299 parcels that had previously been mapped with RPA and in RPA being added to 187 parcels that had previously been mapped outside the RPA.

The Board has the option to proceed with the current draft Map or direct staff to revise the draft Map as described above. However, staff recommends that the draft Map be revised as noted in order to improve overall accuracy. While the proposed updates to the draft Map correct minor deficiencies and improve accuracy, the purpose of the draft Map – to identify the general extent of the RPA and RMA – remains the same.

### **Cost Saving Highlights/Fees**

During the Public Outreach Forums, members of the public expressed concerns regarding the additional costs and proposed fees that would be associated with the draft amendments.

Staff is in the process of developing a proposed fee schedule for Board consideration and will provide an update on the progress of this effort during the Board's September 21, 2010, Committee of the Whole Meeting. A Cost Estimate Table prepared by a local environmental consultant was provided in the May 5, 2010, Board/Planning Commission Joint Meeting packet.

A summary showing how current grading permit fees and expenses would apply to projects within the Resource Management Area ("RMA"), the RMA/Possible RPA, and the RPA is provided as Attachment #5. These fees and expenses are associated solely with the grading permit and based upon current grading permit fees. There may be additional expenses associated with development within the RPA, as summarized in Attachment #2, in addition to Board initiated fees for RPA delineations, RPA waivers, RPA exceptions, and water quality impact assessments.

The draft amendments incorporate the following cost saving measures:

- The RPA Screening Tool was developed to ensure that an RPA delineation would not be required in conjunction with grading permit applications for individual single family detached dwellings and/or associated accessory structures, or any structure intended for agricultural use that disturbs greater than 2,500 square feet in area and is located more than 200 feet from drainage features. Where land disturbance greater than 2,500 square feet associated with the above-mentioned projects is proposed within 200 feet of a drainage feature (the area identified on the RPA Screening Tool as RMA/Possible RPA), staff will perform a preliminary assessment to determine if an RPA delineation is needed. Staff estimates that only 20% of the drainage features identified in the RMA/Possible RPA have the potential to be perennial.
- A modified Perennial Flow Determination may be submitted for water bodies with a drainage area less than 35 acres. A modified Perennial Flow Determination would require considerably less detail (e.g., photographs of the stream), and could be prepared and submitted by the property owner if an RPA delineation is required.

- The requirements for grading permits were designed so that grading plans would only need to be prepared by an engineer if disturbances are within the RPA or within 100-feet of the RPA (as confirmed by an RPA delineation). A grading plan could be prepared and submitted by a land owner (no engineer needed) in conjunction with grading permits for disturbances outside of these areas.
- An amendment to the Erosion Control Ordinance was proposed to authorize the Director of Building and Development to waive the erosion and sediment control bond for certain projects that disturb less than 5,000 square feet. Staff recommends that this amendment be revised to eliminate the requirement for a bond for single family detached dwellings, associated accessory structures, or any structure intended for agricultural use that disturbs less than 10,000 square feet, except within the Mountainside Development Overlay District and Steep Slopes areas (because a grading permit is currently required for disturbances of any size). Staff's recommended revisions to the Erosion Control Ordinance are provided as Attachment #6.
- The Water Quality Impact Assessment (WQIA), which would be required for land disturbing activity, development, or redevelopment in the Resource Protection Area, has been divided into two types, a Minor WQIA and a Major WQIA. A Minor WQIA would be required for disturbances of 2,500 square feet or less in the landward 50-feet of the RPA (the 50 feet farthest from the water body with perennial flow). For the Minor WQIA, staff could perform the RPA delineation and the property owner could provide all other required materials without assistance from a consultant or engineer. A Major WQIA would be required for disturbances greater than 2,500 square feet in the RPA and/or encroachments into the seaward 50-feet of the RPA (the 50 feet closest to the water body with perennial flow). The Major WQIA would require an RPA delineation and a tree cover inventory prepared by a consultant and an engineered plan.

### **Stormwater Management Pond Research**

During the June 15, 2010 Committee of the Whole Meeting, Chairman York inquired whether RPA applied to wet ponds that serve as stormwater management facilities. Staff has researched this issue and spoken with staff from the Chesapeake Bay Local Assistance Division. The Guidance from the Chesapeake Bay Local Advisory Board, entitled "Determinations of Water Bodies with Perennial Flow," clarifies that wet stormwater management facilities (lakes, ponds, and other impoundments) are exempt from classification as a water body with perennial flow, except in cases where the size of the facility exceeds stormwater management requirements. In the latter situation, the facility is considered to be an amenity and is treated as a water body with perennial flow (with an associated RPA).

In creating the draft Map, staff applied RPA to all wet ponds that had perennial flow into, through, or out of the pond. Staff has researched 43 wet ponds in Eastern Loudoun to date located within the RPA on the draft Map based upon the above-mentioned guidance and found 27 should be classified as amenities (and have an associated RPA) and 16 should be classified as stormwater management facilities (with no associated RPA). An exhibit depicting the examined wet ponds is provided as Attachment #7. Staff recommends that the draft Map be revised to remove the RPA adjacent to the 21 ponds identified as being stormwater management facilities.

## **Chesapeake Bay TMDL (Total Maximum Daily Load)**

There has been considerable discussion recently regarding the potential implications of the impending Chesapeake Bay TMDL and how it relates to the County's draft amendments.

The Environmental Protection Agency (EPA) is establishing a federal TMDL for the Chesapeake Bay due to the fact that the water quality goals set for 2010 in the *Chesapeake 2000* Agreement have not been met and because stream impairments identified within the Chesapeake Bay watershed have not been adequately addressed. Under court order, the Chesapeake Bay TMDL must be established no later than May 1, 2011. EPA has established a goal to complete the Chesapeake Bay TMDL by December 31, 2010.

Commonly referred to as a "pollution diet," a TMDL sets the maximum permissible amount of sediment and nutrients (nitrogen and phosphorus) that can be discharged into a water body. Under the Chesapeake Bay TMDL, the EPA will allocate a maximum permissible amount of sediment and nutrients that each jurisdiction located in the Chesapeake Bay watershed (New York, Pennsylvania, West Virginia, Delaware, Maryland, Virginia, and the District of Columbia) can discharge into tributaries that drain to the Chesapeake Bay. These jurisdictions will then distribute the allocations among various watersheds. In Virginia, the allocations will be distributed among Virginia's major river basins and the 35 segments that make up Virginia's Chesapeake Bay watershed.

To meet these allocations, each state is required to submit a Watershed Implementation Plan ("WIP") to the EPA that sets two-year milestones to achieve the required sediment and nutrient reductions. Virginia's Draft Phase 1 WIP ("Draft WIP") was published on September 7, 2010, and is currently undergoing public comment and EPA review. The Draft WIP is available online at: <http://www.deq.virginia.gov/tmdl/chesapeakebay.html>. There is a webinar planned for October 7, 2010 and a public meeting will be held in Annandale on October 5, 2010. Additional details are posted at: <http://www.deq.virginia.gov/tmdl/bayinfo.html>.

Given the September 7, 2010 publish date, staff has not yet had an opportunity to review the Draft WIP in detail. An initial reading indicates that although the Draft WIP focuses primarily on expansion of voluntary efforts and existing programs, the Bay Act, and its potential expansion to Non-Tidewater localities in Virginia, is referenced as key to achieving the required sediment and nutrient reductions required by the TMDL. For example, Section 6.5 "Contingencies," under Chapter 6 "Agriculture," states that "expanding the act to cover additional localities could be considered." In addition, Section 8.4 "Strategy to Fill Gaps," under Chapter 8 "Onsite Wastewater," includes an option to "consider requirements for septic pump-outs at five year intervals in areas outside the jurisdiction of the Chesapeake Bay Preservation Act."

The Draft WIP does not identify the specific allocations that would be required at the locality level; however, staff anticipates that this information may be included in the Phase 2 WIP (tentatively planned for June 2011).

While the details and timing of the Chesapeake Bay TMDL are not completely defined, two-year progress milestones are forthcoming, with the first two-year milestone ending in December 2011. A major review of the TMDL program (and implementation of any necessary revisions) is

expected to occur in 2017 and all control measures required to meet the TMDL are expected to be in place by 2025.

Staff previously provided a presentation regarding TMDLs as an attachment to the July 21, 2010, Transportation Land Use Committee meeting packet for the watershed management program update (Item #8). A copy of the presentation has been included as Attachment #8.

While funding is addressed in the Draft WIP and is addressed in conjunction with two federal Bills now in committee (House Bill HR.3265 – Chesapeake Bay Restoration Act of 2009 and Senate Bill S. 1816 – Chesapeake Clean Water Ecosystem Restoration Act of 2009), there have been no specific federal or state funding commitments for implementation of the TMDL.

The 2009 Countywide Stream Assessment indicates that 78 percent of the County's streams are stressed or severely stressed and would be considered impaired because they do not meet state water quality standards. The best management practices that would be implemented through adoption of the County's draft amendments would provide sediment and nutrient reductions that would help address these impairments and improve local water quality. The County would also be able to obtain credit for implementation of these practices toward any future sediment and nutrient allocations associated with the Chesapeake Bay TMDL. Not implementing the proposed amendments could result in the additional loss of riparian buffers and wetlands adjacent to perennial streams, which could further degrade water quality, and further complicate the County's ability to achieve the required pollutant allocations if and when imposed by the Commonwealth.

### **Comprehensive Plan Amendment (CPAM)**

At the May 12, 2010 Work Session, the Planning Commission voted (8-0-1) to forward CPAM-2009-0002 to a future Work Session for certification. The CPAM was deferred from certification until the Board's schedule for action was further defined, because Virginia law requires that the Board act within 90 days of certification of the CPAM by the Planning Commission. Staff is seeking additional direction from the Board regarding the timing of the Planning Commission certification.

Additionally, subsequent to the Planning Commission's vote on the draft amendments, the Board approved the 2010 Revised Countywide Transportation Plan (2010 CTP) on June 15, 2010. CPAM 2009-0002 included draft changes to the 2001 CTP. Now that the CTP has been updated, the proposed amendment to the 2001 CTP will no longer be carried forward as part of the CPAM. Policy changes to the 2010 CTP could be considered at a later date.

### **WRTAC Memo**

On July 21, 2010, during the watershed management program update (Item #8), the Transportation and Land Use Committee requested that the Water Resources Technical Advisory Committee ("WRTAC") provide an assessment of the draft amendments to the Board of Supervisors for their September 21, 2010, meeting. The referenced memorandum is provided as Attachment #9. A representative from the WRTAC will be present at the meeting to discuss the memo and any other questions the Board may have regarding their input.

## **NEXT STEPS / OTHER ISSUES**

In addition to the issues identified above, staff provided a response matrix (Attachment #10) in the June 15, 2010, Board Committee of the Whole Meeting packet that addressed 82 questions that were raised by Board members following the May 24, 2010, public hearing. The Board has not yet had an opportunity to discuss the matrix items in detail and may elect to discuss these items during this meeting, or a subsequent meeting. Staff is prepared to provide a presentation addressing the most prevalent issues identified in the matrix, at the Board's discretion. Staff also provided a separate response matrix that addressed 183 questions that were raised during the Planning Commission review process in the May 5, 2010 Board/Planning Commission Joint Meeting packet.

Staff from the Chesapeake Bay Local Assistance Division of the Virginia Department of Conservation and Recreation will also be in attendance to respond to Board questions or concerns.

## **FISCAL IMPACT:**

Based on the current text of the draft amendments, staff anticipates that existing levels of staff time and resources, which are already allocated within the respective budgets of the Department of Building and Development, the Department of Planning, Extension Services, and the Soil and Water Conservation District, would be sufficient to administer the draft amendments.

Several new application types would also be required to implement the draft amendments and can be implemented with existing resources.

## **DRAFT MOTION:**

1. A. I move that the Board of Supervisors forward CPAM-2009-0002, ZOAM 2009-0004, DOAM 2009-0004/Proposed Chapter 1222 of the Codified Ordinances of Loudoun County and Amendments to Chapters 1066 and 1220 of the Codified Ordinances of Loudoun County/Chesapeake Bay Preservation Act Amendments to a future meeting for review.

OR

2. I move an alternate motion.

**ATTACHMENTS:**

1. Environmental Review and Chesapeake Bay Preservation Ordinance Timeline
2. Sample Public Outreach Forum Presentation
3. Draft CBPO Amendments (revised through September 21, 2010)
4. Map Edit Exhibits
5. Grading Permit Cost Spreadsheet
6. Draft Erosion Control Ordinance Amendments
7. Pond Exhibit
8. TMDL Presentation, to include estimated timeline
9. WRTAC Memo
10. Board Comment Response Matrix (same as provided to the Board on June 15, 2010)